



NICKI BURNS

RADON

Element Symbol: **Rn**

Atomic Number: **86**

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Radon is element 86 in the periodic table and is one of the noble gases along with helium, neon, argon, krypton and xenon. Radon exists in a number of isotopic forms and its most stable form is radon-222.

Radon is colourless, odourless and inert which means that it does not react with materials or other gases. Being a gas it can filter through material and emanate from material into the atmosphere.

Radon is formed from the natural the decay of radium-226 from the naturally occurring uranium-238 decay series. Radon is natural and exists everywhere in the atmosphere in varying concentrations.

Radon levels are higher in confined areas or areas with higher radium concentrations and low over the oceans.

Radon itself is radioactive and it decays into other radioactive elements, some of which are solid particles. These “radon decay products” can subsequently be inhaled and give a radiation dose to the lungs. Although it is radioactive, radon is really only a transport mechanism for the more radioactive radon decay products.

Radon has no real commercial uses apart from calibrating radon detection equipment.

Provided by the element sponsor Jim Hondros

ARTISTS DESCRIPTION

Since Radon is a noxious gas I decided to base this print on the harmful effects of high exposure to this chemical element. Studies have shown a clear link between breathing high concentrations of Radon and incidences of lung cancer. Radon is the second most frequent cause of lung cancer, after cigarette smoking, causing 21,000 lung cancer deaths per year in the United States.

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